**PCT** WORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 6 : G01N 7/00, 33/00 | A1

(11) International Publication Number: **WO 00/25108**

(43) International Publication Date: 4 May 2000 (04.05.00)

(21) International Application Number: PCT/US99/25343

(22) International Filing Date: 28 October 1999 (28.10.99)

(30) Priority Data:
09/181,793 28 October 1998 (28.10.98) US

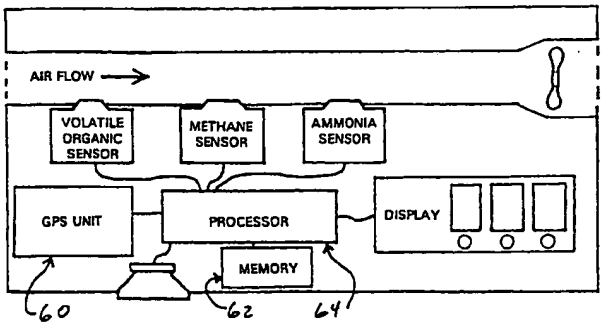
(71)(72) Applicant and Inventor: COPP, Douglas, F. [US/US]; Copp Life Systems, P.O. Box 489, Alameda, CA 94501 (US).

(74) Agent: KELLY, Patrick, D.; 707 Creekbriar Lane, St. Louis, MO 63122-2221 (US).

(81) Designated States: AU, CA, CN, JP, MX, US, Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).

**Published**
*With international search report.*

(54) Title: METHOD AND APPARATUS FOR LOCATING HIDDEN CORPSES BY DETECTING VOLATILE GAS COMBINATIONS




(57) Abstract

A portable, hand-held device for locating the remains of a corpseby sensing a combination of volatile gases which are released during bacterial decomposition of human tissue. One such combination of volatile gases includes methane, ammonia and a volatile organic compound, such as a ketone that is released when livers decompose. The portable device comprises: a combination of commercially available sensors (14, 16, 18) which can detect these chemicals in parts per million concentrations; an air conduit (22) with a fan (20) to draw ambient air across the sensors (14, 16, 18); and various types of alarm/visual indicators (42, 44) to alert an operator the detection of all three gases which may indicate the location of probable decomposing corpse hidden in the water, mud, rubble, soil or other coverings, at or nearby. The device can also include a global positioning system (60) to ascertain the exact location.